



IFWO

RAW SEQUENCE LISTING DATE: 08/31/2004
 PATENT APPLICATION: US/10/806,573 TIME: 13:26:28

Input Set : N:\Crif3\RULE60\10806573.raw.txt
 Output Set: N:\CRF4\08312004\J806573.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:
 5 (i) APPLICANT: BLUMENFELD, ANAT; GUSELLA, JAMES F;
 6 BREAKFIELD, XANDRA, O;
 7 SLAUGENHAUPT, SUSAN
 9 (ii) TITLE OF INVENTION: USE OF GENETIC MARKERS TO
 10 DIAGNOSE FAMILIAL DYSAUTONOMIA
 12 (iii) NUMBER OF SEQUENCES: 34
 14 (iv) CORRESPONDENCE ADDRESS:
 15 (A) ADDRESSEE: MORGAN & FINNEGAN, L.L.P.
 16 (B) STREET: 345 PARK AVENUE
 17 (C) CITY: NEW YORK
 18 (D) STATE: NEW YORK
 19 (E) COUNTRY: USA
 20 (F) ZIP: 10154
 22 (v) COMPUTER READABLE FORM:
 23 (A) MEDIUM TYPE: FLOPPY DISK
 24 (B) COMPUTER: IBM PC COMPATIBLE
 25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 26 (D) SOFTWARE: ASCII
 C--> 28 (vi) CURRENT APPLICATION DATA:
 C--> 29 (A) APPLICATION NUMBER: US/10/806,573
 C--> 30 (B) FILING DATE: 22-Mar-2004
 W--> 38 (C) CLASSIFICATION: 435
 40 (vii) PRIOR APPLICATION DATA:
 W--> 34 (A) APPLICATION NUMBER: US/08/480,655
 35 (B) FILING DATE: 07-JUNE-1995
 W--> 36 (A) APPLICATION NUMBER: 08/049,678
 37 (B) FILING DATE: 16-APRIL-1993
 W--> 41 (A) APPLICATION NUMBER: US/07/890,719
 42 (B) FILING DATE: 29-MAY-1992
 44 (viii) ATTORNEY/AGENT INFORMATION:
 45 (A) NAME: KENNETH H. SONNENFELD
 46 (B) REGISTRATION NUMBER: 33,285
 47 (C) REFERENCE/DOCKET NUMBER: 1829-4001US1
 49 (ix) TELECOMMUNICATION INFORMATION:
 50 (A) TELEPHONE: 212-451-8513
 51 (B) TELEFAX: 212-751-6849
 54 (2) INFORMATION FOR SEQ ID NO: 1:
 56 (i) SEQUENCE CHARACTERISTICS:
 57 (A) LENGTH: 20
 58 (B) TYPE: NUCLEIC ACID
 67 (C) STRANDEDNESS: SINGLE

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68          (D) TOPOLOGY: UNKNOWN
W--> 70      (ii) MOLECULE TYPE: OLIGONUCLEOTIDE
72      (iii) HYPOTHETICAL: No
74      (ix) FEATURE:
75          (A) NAME/KEY: PRIMER SEQUENCE OF HXB LOCUS
76          (B) LOCATION: CHROMOSOME 9
77          (C) IDENTIFICATION METHOD:
78          (D) OTHER INFORMATION:
80      (x) PUBLICATION INFORMATION:
81          (A) AUTHORS: OZELIUS, L; SCHUBACK, DE;
82 STEFANSSON, K; SLAUGENHAUPT, S;
83 GUSELLA, JF; BREAKEFIELD, XO
84          (B) TITLE: DINUCLEOTIDE REPEAT POLYMORPHISM
85 FOR THE HEXABRACHION GENE (HXB) ON
86 CHROMOSOME 9q32-34
87          (C) JOURNAL: HUMAN MOLECULAR GENETICS
88          (D) VOLUME: 1
89          (E) ISSUE: 2
90          (F) PAGES: 141
91          (G) DATE: 1992
92          (H) DOCUMENT NUMBER:
93          (I) FILING DATE:
94          (J) PUBLICATION DATE:
95          (K) RELEVANT RESIDUES IN SEQ ID NO:
97      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
99 ATAGCCAAAG AGAGGTGCCC                20
102 (2) INFORMATION FOR SEQ ID NO: 2:
104      (i) SEQUENCE CHARACTERISTICS:
105          (A) LENGTH: 20
106          (B) TYPE: NUCLEIC ACID
107          (C) STRANDEDNESS: SINGLE
108          (D) TOPOLOGY: UNKNOWN
W--> 110     (ii) MOLECULE TYPE: OLIGONUCLEOTIDE
112     (iii) HYPOTHETICAL: No
113     (ix) FEATURE:
114         (A) NAME/KEY: PRIMER SEQUENCE OF HXB LOCUS
115         (B) LOCATION: CHROMOSOME 9
116         (C) IDENTIFICATION METHOD:
117         (D) OTHER INFORMATION:
127     (x) PUBLICATION INFORMATION:
128         (A) AUTHORS: OZELIUS, L; SCHUBACK, DE;
129 STEFANSSON, K; SLAUGENHAUPT, S;
130 GUSELLA, JF; BREAKEFIELD, XO
131         (B) TITLE: DINUCLEOTIDE REPEAT POLYMORPHISM FOR
132 THE HEXABRACHION GENE (HXB) ON CHROMOSOME
133 9q32-34
134         (C) JOURNAL: HUMAN MOLECULAR GENETICS
135         (D) VOLUME: 1
136         (E) ISSUE: 2

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137      (F) PAGES: 141
138      (G) DATE: 1992
139      (H) DOCUMENT NUMBER:
140      (I) FILING DATE:
141      (J) PUBLICATION DATE:
142      (K) RELEVANT RESIDUES IN SEQ ID NO:
144      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
146 AGAGCCCTTC TGTCTTTTCC 20
149 (2) INFORMATION FOR SEQ ID NO: 3:
151      (i) SEQUENCE CHARACTERISTICS:
152          (A) LENGTH: 20
153          (B) TYPE: NUCLEIC ACID
154          (C) STRANDEDNESS: SINGLE
155          (D) TOPOLOGY: UNKNOWN
W--> 157      (ii) MOLECULE TYPE: OLIGONUCLEOTIDE
159      (iii) HYPOTHETICAL: No
161      (ix) FEATURE:
162          (A) NAME/KEY: PRIMER SEQUENCE OF D9S127 LOCUS
163          (B) LOCATION: CHROMOSOME 9
164          (C) IDENTIFICATION METHOD:
165          (D) OTHER INFORMATION:
167      (x) PUBLICATION INFORMATION:
168          (A) AUTHORS: LYALL, JEW; FURLONG, RA;
169 YUILLE, MAR; GOUDIE, DR; LEVERSHA, MA;
170 AFFARA, NA; FERGUSON-SMITH, MA
171          (B) TITLE: A DINUCLEOTIDE REPEAT POLYMORPHISM
172 AT THE D9S127 LOCUS
173          (C) JOURNAL: NUCLEIC ACIDS RESEARCH
174          (D) VOLUME: 20
175          (E) ISSUE: 4
176          (F) PAGES: 925
177          (G) DATE: 1992
178          (H) DOCUMENT NUMBER:
187          (I) FILING DATE:
188          (J) PUBLICATION DATE:
189          (K) RELEVANT RESIDUES IN SEQ ID NO:
191      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
193 CCCTCAAAAT TGCTGTCTAT 20
196 (2) INFORMATION FOR SEQ ID NO: 4:
198      (i) SEQUENCE CHARACTERISTICS:
199          (A) LENGTH: 23
200          (B) TYPE: NUCLEIC ACID
201          (C) STRANDEDNESS: SINGLE
202          (D) TOPOLOGY: UNKNOWN
W--> 204      (ii) MOLECULE TYPE: OLIGONUCLEOTIDE
206      (iii) HYPOTHETICAL: No
208      (ix) FEATURE:
209          (A) NAME/KEY: PRIMER SEQUENCE OF D9S127 LOCUS
210          (B) LOCATION: CHROMOSOME 9

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211 (C) IDENTIFICATION METHOD:
 212 (D) OTHER INFORMATION:
 214 (x) PUBLICATION INFORMATION:
 215 (A) AUTHORS: LYALL, JEW; FURLONG, RA;
 216 YUILLE, MAR; GOUDIE, DR; LEVERSHA, MA;
 217 AFFARA, NA; FERGUSON-SMITH, MA
 218 (B) TITLE: A DINUCLEOTIDE REPEAT POLYMORPHISM
 219 AT THE D9S127 LOCUS
 220 (C) JOURNAL: NUCLEIC ACIDS RESEARCH
 221 (D) VOLUME:20
 222 (E) ISSUE:4
 223 (F) PAGES: 925
 224 (G) DATE: 1992
 225 (H) DOCUMENT NUMBER:
 226 (I) FILING DATE:
 227 (J) PUBLICATION DATE:
 228 (K) RELEVANT RESIDUES IN SEQ ID NO:
 230 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
 232 AGATTGATTG ATACAAGGAT TTG 23
 235 (2) INFORMATION FOR SEQ ID NO: 5:
 237 (i) SEQUENCE CHARACTERISTICS:
 238 (A) LENGTH: 20
 247 (B) TYPE: NUCLEIC ACID
 248 (C) STRANDEDNESS: SINGLE
 249 (D) TOPOLOGY: UNKNOWN
 251 (ii) MOLECULE TYPE: OLIGONUCLEOTIDE
 253 (iii) HYPOTHETICAL: No
 255 (ix) FEATURE:
 256 (A) NAME/KEY:PRIMER SEQUENCE FOR D9S58 LOCUS
 257 (B) LOCATION: CHROMOSOME 9
 258 (C) IDENTIFICATION METHOD:
 259 (D) OTHER INFORMATION:
 261 (x) PUBLICATION INFORMATION:
 262 (A) AUTHORS: KWIATKOWSKI, DAVID J;
 263 HENSKE, ELIZABETH P; WEIMER, KIM;
 264 OZELIUS, LAURIE; GUSELLA, JAMES J;
 265 HAINES, JONATHAN
 266 (B) TITLE: CONSTRUCTION OF A GT POLYMORPHISM
 267 MAP OF HUMAN 9Q
 268 (C) JOURNAL: GENOMICS
 269 (D) VOLUME:12
 270 (E) ISSUE:
 271 (F) PAGES: 229-240
 272 (G) DATE: 1992
 273 (H) DOCUMENT NUMBER:
 274 (I) FILING DATE:
 275 (J) PUBLICATION DATE:
 276 (K) RELEVANT RESIDUES IN SEQ ID NO:
 278 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

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280 CCTGAGTAGC CGGGACTATA                                20
283 (2) INFORMATION FOR SEQ ID NO: 6:
285     (i) SEQUENCE CHARACTERISTICS:
286         (A) LENGTH: 21
287         (B) TYPE: NUCLEIC ACID
288         (C) STRANDEDNESS: SINGLE
289         (D) TOPOLOGY: UNKNOWN
W--> 291     (ii) MOLECULE TYPE: OLIGONUCLEOTIDE
293     (iii) HYPOTHETICAL: No
295     (ix) FEATURE:
296         (A) NAME/KEY: PRIMER SEQUENCE OF D9S58 LOCUS
297         (B) LOCATION: CHROMOSOME 9
298         (C) IDENTIFICATION METHOD:
307         (D) OTHER INFORMATION:
309     (x) PUBLICATION INFORMATION:
310         (A) AUTHORS: KWIATKOWSKI, DAVID J;
311 HENSKE, ELIZABETH P; WEIMER, KIM;
312 OZELIUS, LAURIE; GUSELLA, JAMES J;
313 HAINES, JONATHAN
314         (B) TITLE: CONSTRUCTION OF A GT POLYMORPHISM
315 MAP OF HUMAN 9Q
316         (C) JOURNAL: GENOMICS
317         (D) VOLUME:12
318         (E) ISSUE:
319         (F) PAGES: 229-240
320         (G) DATE: 1992
321         (H) DOCUMENT NUMBER:
322         (I) FILING DATE:
323         (J) PUBLICATION DATE:
324         (K) RELEVANT RESIDUES IN SEQ ID NO:
326     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
328 TAGGCAACAC ATCAAGATCC T                                21
331 (2) INFORMATION FOR SEQ ID NO: 7:
333     (i) SEQUENCE CHARACTERISTICS:
334         (A) LENGTH: 20
335         (B) TYPE: NUCLEIC ACID
336         (C) STRANDEDNESS: SINGLE
337         (D) TOPOLOGY: UNKNOWN
W--> 339     (ii) MOLECULE TYPE: OLIGONUCLEOTIDE
341     (iii) HYPOTHETICAL: No
343     (ix) FEATURE:
344         (A) NAME/KEY: PRIMER SEQUENCE OF D9S59 LOCUS
345         (B) LOCATION: CHROMOSOME 9
346         (C) IDENTIFICATION METHOD:
347         (D) OTHER INFORMATION:
348     (x) PUBLICATION INFORMATION:
349         (A) AUTHORS: KWIATKOWSKI, DAVID J;
350 HENSKE, ELIZABETH P; WEIMER, KIM;
351 OZELIUS, LAURIE; GUSELLA, JAMES J;

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VERIFICATION SUMMARY

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Input Set : N:\Crif3\RULE60\10806573.raw.txt

Output Set: N:\CRF4\08312004\J806573.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(vi) CURRENT APPLICATION DATA:]
L:28 M:220 C: Keyword misspelled or invalid format, [(vi) CURRENT APPLICATION DATA:]
L:29 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:30 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:36 M:238 W: Alpha Fields not Ordered, Reordered [(A) APPLICATION NUMBER:] of (1)(vii)
L:38 M:238 W: Alpha Fields not Ordered, Reordered [(C) CLASSIFICATION:] of (1)(vi)
L:70 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1
L:110 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2
L:157 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3
L:204 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4
L:251 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5
L:291 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6
L:339 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=7
L:386 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8
L:433 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9
L:473 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=10
L:521 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=11
L:568 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=12
L:616 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=13
L:655 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14
L:715 M:220 C: Keyword misspelled or invalid format, [(B) MAP POSITION:]
L:715 M:238 W: Alpha Fields not Ordered, Reordered [(B) MAP POSITION:] of (2)(viii)
L:703 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=15
L:760 M:220 C: Keyword misspelled or invalid format, [(B) MAP POSITION:]
L:760 M:238 W: Alpha Fields not Ordered, Reordered [(B) MAP POSITION:] of (2)(viii)
L:748 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=16
L:805 M:220 C: Keyword misspelled or invalid format, [(B) MAP POSITION:]
L:805 M:238 W: Alpha Fields not Ordered, Reordered [(B) MAP POSITION:] of (2)(viii)
L:793 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=17
L:850 M:220 C: Keyword misspelled or invalid format, [(B) MAP POSITION:]
L:850 M:238 W: Alpha Fields not Ordered, Reordered [(B) MAP POSITION:] of (2)(viii)
L:830 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=18
L:875 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=19
L:921 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=20
L:980 M:220 C: Keyword misspelled or invalid format, [(B) MAP POSITION:]
L:980 M:238 W: Alpha Fields not Ordered, Reordered [(B) MAP POSITION:] of (2)(viii)
L:968 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=21
L:1017 M:220 C: Keyword misspelled or invalid format, [(B) MAP POSITION:]
L:1017 M:238 W: Alpha Fields not Ordered, Reordered [(B) MAP POSITION:] of (2)(viii)
L:1005 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=22
L:1050 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=23
L:1097 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=24
L:1136 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=25
L:1181 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=26
L:1226 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=27
L:1249 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=28
L:1280 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=29
L:1303 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=30

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L:1346 M:220 C: Keyword misspelled or invalid format, [(B) MAP POSITION:]
L:1346 M:238 W: Alpha Fields not Ordered, Reordered [(B) MAP POSITION:] of (2)(viii)
L:1334 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=31
L:1391 M:220 C: Keyword misspelled or invalid format, [(B) MAP POSITION:]
L:1391 M:238 W: Alpha Fields not Ordered, Reordered [(B) MAP POSITION:] of (2)(viii)
L:1371 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=32
L:1428 M:220 C: Keyword misspelled or invalid format, [(B) MAP POSITION:]
L:1428 M:238 W: Alpha Fields not Ordered, Reordered [(B) MAP POSITION:] of (2)(viii)
L:1416 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=33
L:1473 M:220 C: Keyword misspelled or invalid format, [(B) MAP POSITION:]
L:1473 M:238 W: Alpha Fields not Ordered, Reordered [(B) MAP POSITION:] of (2)(viii)
L:1461 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=34